

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A projection-type display device comprising:

a projection surface on which a predetermined projection image is displayed through projection from a rear side;

a writing surface on which an image can be drawn directly from a front side in a superimposing manner with the projection image displayed on said projection surface;

a photography part photographing an image drawn on said writing surface from the rear side; and

a blocking part blocking a light beam emitted from a projecting part projecting the light beam onto said projection surface so as to display the projection image thereon, wherein when said photography part photographs an image said blocking part blocks the light beam emitted from the projecting part so as to prevent all of the light beam from being applied to the projection surface.

Claim 2 (Original): The projection-type display device as claimed in claim 1, further comprising a projection part which emits a light beam comprising an image signal onto said projection surface so as to display the predetermined image on said projection surface.

Claim 3 (Original): The projection-type display device as claimed in claim 2, wherein:

said writing surface comprises the same surface as said projection surface or is located on the same the side of said projection surface as that on which a user who draws an image onto said writing surface exists; and

said display device further comprises an extracting part extracting a user-drawn image from an image photographed by said photography part.

Claim 4 (Original): The projection-type display device as claimed in claim 3, further comprising a combining part combining at least a part of the projection image projected onto said projection surface with the user-drawn image extracted by said extracting part.

Claim 5 (Original): The projection-type display device as claimed in claim 4, wherein:

a mode selecting part is provided through which a selection is made between a first photography mode in which the user-drawn image is obtained and a second photography mode in which the combined image is obtained.

Claim 6 (Original): The projection-type display device as claimed in claim 1, wherein the optical axis of said photography part is perpendicular to said writing surface.

Claim 7 (Original): The projection-type display device as claimed in claim 1, further comprising a part making a correspondence between the projection image and drawn image.

Claim 8 (Original): The projection-type display device as claimed in claim 1, further comprising:

an input part inputting the projection image externally;

a recording part recording at least one of the projection image, user-drawn image and combined image; and

an output part outputting the user-drawn image externally.

Claim 9 (Canceled).

Claim 10 (Previously Presented): The projection-type display device as claimed in claim 1, wherein:

a shifting part shifting a photography area of said photography part on said writing surface is provided;

said photography part takes a photograph several times in a manner such that the photography area thereof is shifted each time by said shifting part; and

a combining part is provided, and, thereby, photographed images obtained through the several times of photography are combined.

Claim 11 (Previously Presented): The projection-type display device as claimed in claim 10, wherein;

said shifting part shifts the photography area by a distance corresponding to one pixel each time;

said shifting part comprises a piezoelectric device; and

the vibration distance of said piezoelectric device corresponds to one pixel.

Claim 12 (Original): The projection-type display device as claimed in claim 1, wherein:

said writing surface is divided into a plurality of areas;

said photography part takes a plurality of photographs of respective ones of the plurality of areas; and

a combining part is provided, and, thereby, a thus-obtained plurality of photographed images are combined.

Claim 13 (Original): The projection-type display device as claimed in claim 1, wherein:

a moving part moving a photography area of said photography part on said writing surface is provided;

said photography part takes a photograph several times in a manner such that the photography area thereof each time corresponds to a different division of said writing surface; and

a combining part is provided, and, thereby, photographed images obtained through the several times of photography are combined.

Claim 14 (Original): The projection-type display device as claimed in claim 13, further comprising a part displaying the photography area onto said projection surface.

Claim 15 (Original): The projection-type display device as claimed in claim 12, further comprising an input part through which instructions of at least one of whether or not a dividing photography is performed in which a part or all of said writing surface is divided and each division is photographed, and the number of divisions in the dividing photography, are input.

Claim 16 (Original): The projection-type display device as claimed in claim 13, further comprising an input part through which instructions of at least one of whether or not a dividing photography is performed in which a part or all of said writing surface is divided and

each division is photographed, and the number of divisions in the dividing photography, are input.

Claim 17 (Original): The projection-type display device as claimed in claim 1, further comprising a lighting part illuminating said writing surface from a side opposite to a side on which said photography part is provided.

Claim 18 (Original): The projection-type display device as claimed in claim 1, further comprising at least one lighting part illuminating said writing surface from a side on which said photography part is provided.

Claim 19 (Original): The projection-type display device as claimed in claim 17, wherein said lighting part comprises a plurality of light sources located symmetrically with respect to a central axis of said writing part or an axis corresponding to an optical axis of a part projecting the projecting image onto said projection surface.

Claim 20 (Original): The projection-type display device as claimed in claim 18, wherein said lighting part comprises a plurality of light sources located symmetrically with respect to a central axis of said writing part or an axis corresponding to an optical axis of a part projecting the projecting image onto said projection surface.

Claim 21 (Original): The projection-type display device as claimed in claim 1, further comprising a dispersion surface removably provided on a surface of said writing surface opposite to a user who draws an image on said writing surface.

Claim 22 (Original): The projection-type display device as claimed in claim 1, further comprising:

a dispersion sheet comprising a dispersion area which covers all or a part of said writing part and a transparent area which transmits, to said writing surface, at least a part of a light beam emitted by a part which projects the projection image onto said projection surface; and

a moving part moving said dispersion sheet.

Claim 23 (Currently Amended): A projection-type display device connected to a computer via a communication network, and operating according to instructions given by said computer, comprising:

a projection surface on which a predetermined projection image is displayed through projection from a rear side;

a writing surface on which an image can be drawn directly from a front side in a superimposing manner with the projection image displayed on said projection surface;

a photography part photographing an image drawn on said writing surface from the rear side; and

a blocking part blocking a light beam emitted from a projecting part projecting the light beam onto said projection surface so as to display the projection image thereon, wherein when said photography part photographs an image said blocking part blocks the light beam emitted from the projecting part so as to prevent all of the light beam from being applied to the projection surface.

Claim 24 (Currently Amended): A computer readable recording medium storing a software program for operating a projection-type display device which comprises:

a projection surface on which a predetermined projection image is displayed through projection from a rear side;

a writing surface on which an image can be drawn directly from a front side in a superimposing manner with the projection image displayed on said projection surface; and

a photography part photographing an image drawn on said writing surface from the rear side; and

a blocking part blocking a light beam emitted from a projecting part projecting the light beam onto said projection surface so as to display the projection image thereon, wherein when said photography part photographs an image said blocking part blocks the light beam emitted from the projecting part so as to prevent all of the light beam from being applied to the projection surface,

wherein said software program is read by a computer which thus performs the following steps:

a) making said photography part to take a photograph of said writing surface;
and

b) extracting an image drawn by a user onto said writing surface, from the photographed image obtained through said step a).

Claim 25 (Original): The computer readable recording medium as claimed in claim 24, wherein said software program causes the computer to further perform the following step:

c) combining at least a part of the projection image projected onto said projection surface with the user-drawn image extracted by said step b).

Claim 26 (Original): The computer readable recording medium as claimed in claim 25, wherein said software program causes the computer to further perform the following step:

d) causing a user to select a mode between a first photography mode in which the user drawn image is obtained and a second photography mode in which the combined image is obtained.

Claim 27 (Original): The computer readable recording medium as claimed in claim 24, wherein said software program causes the computer to further perform the following steps:

c) causing said photography part to take a plurality of photographs of respective ones of a predetermined plurality of divisions of said writing surface; and

d) combining a thus-obtained plurality of photographed images.

Claim 28 (Original): The computer readable recording medium as claimed in claim 24, wherein said software program causes the computer to further perform the following steps:

c) moving a photography area of said photography part on said writing surface;

d) causing said photography part to take a photograph several times in a manner such that the photography area thereof each time corresponds to a different division of said writing surface; and

e) combining photographed images obtained through the several times of photography.

Claim 29 (Original): The computer readable recording medium as claimed in claim 27, wherein said software program causes the computer to further perform the following steps:

e) causing a user to determine at least one of whether or not a dividing photography is performed in which a part or all of said writing surface is divided and each division is photographed, and the number of divisions in the dividing photography.

Claim 30 (Original): The computer readable recording medium as claimed in claim 28, wherein said software program causes the computer to further perform the following steps:

f) causing a user to determine at least one of whether or not a dividing photography is performed in which a part or all of said writing surface is divided and each division is photographed and, the number of divisions in the dividing photography.

Claim 31 (Currently Amended): A software program for operating a projection-type display device which comprises:

a projection surface on which a predetermined projection image is displayed through projection from a rear side;

a writing surface on which an image can be drawn directly from a front side in a superimposing manner with the projection image displayed on said projection surface;

a photography part photographing an image drawn on said writing surface from the rear side; and

a blocking part blocking a light beam emitted from a projecting part projecting the light beam onto said projection surface so as to display the projection image thereon, wherein when said photography part photographs an image said blocking part blocks the light beam emitted from the projecting part so as to prevent all of the light beam from being applied to the projection surface,

wherein said software program is read by a computer which thus performs the following steps:

- a) making said photography part to take a photograph of said writing surface;
- and
- b) extracting an image drawn by a user onto said writing surface, from the photographed image obtained through said step a).

Claim 32 (Original): The software program as claimed in claim 31, wherein said software program causes the computer to further perform the following step:

- c) combining at least a part of the projection image projected onto said projection surface with the user-drawn image extracted by said step b).

Claim 33 (Original): The software program as claimed in claim 32, wherein said software program causes the computer to further perform the following steps:

- d) causing a user to select a mode between a first photography mode in which the user-drawn image is obtained and a second photography mode in which the combined image is obtained.

Claim 34 (Original): The software program as claimed in claim 31, wherein said software program causes the computer to further perform the following steps:

- c) causing said photography part to take a plurality of photographs of respective ones of a predetermined plurality of divisions of said writing surface; and
- d) combining a thus-obtained plurality of photographed images.

Claim 35 (Original): The software program as claimed in claim 31, wherein said software program causes the computer to further perform the following steps:

- c) moving a photography area of said photography part on said writing surface;
- d) causing said photography part to take a photograph several times in a manner such that the photography area thereof each time corresponds to a different division of said writing surface; and
- e) combining photographed images obtained through the several times of photography.

Claim 36 (Original): The software programs as claimed in claim 34, causing the computer to further perform the following steps:

- e) causing a user to determine at least one of whether or not a dividing photography is performed in which a part or all of said writing surface is divided and each division is photographed, and the number of divisions in the dividing photography.

Claim 37 (Original): The software program as claimed in claim 35, causing the computer to further perform the following steps:

- f) causing a user to determine at least one of whether or not a dividing photography is performed in which a part or all of said writing surface is divided and each division is photographed, and the number of divisions in the dividing photography.

Claim 38 (Currently Amended): A projection-type display device comprising:

- a projection surface on which a predetermined projection image is displayed through projection from a rear side;

a writing surface on which an image can be drawn directly from a front side in a superimposing manner with the projection image displayed on said projection surface; and

a photography part photographing an image drawn on said writing surface from the rear side,

wherein:

a shifting part shifting a photography area of said photography part on said writing surface is provided;

said photography part takes a photograph ~~several~~ at least two times in a manner such that the photography area thereof is shifted each time by said shifting part; and

a combining part is provided, and, thereby, photographed images obtained through the several times of photography are combined.

Claim 39 (Previously Presented): The projection-type display device as claimed in claim 38, further comprising a projection part which emits a light beam comprising an image signal onto said projection surface so as to display the predetermined image on said projection surface.

Claim 40 (Previously Presented): The projection-type display device as claimed in claim 39, wherein:

said writing surface comprises the same surface as said projection surface or is located on the same the side of said projection surface as that on which a user who draws an image onto said writing surface exists; and

said display device further comprises an extracting part extracting a user-drawn image from an image photographed by said photography part.

Claim 41 (Previously Presented): The projection-type display device as claimed in claim 40, further comprising a combining part combining at least a part of the projection image projected onto said projection surface with the user-drawn image extracted by said extracting part.

Claim 42 (Previously Presented): The projection-type display device as claimed in claim 41, wherein:

a mode selecting part is provided through which a selection is made between a first photography mode in which the user-drawn image is obtained and a second photography mode in which the combined image is obtained.

Claim 43 (Previously Presented): The projection-type display device as claimed in claim 38, wherein the optical axis of said photography part is perpendicular to said writing surface.

Claim 44 (Previously Presented): The projection-type display device as claimed in claim 38, further comprising a part making a correspondence between the projection image and drawn image.

Claim 45 (Previously Presented): The projection-type display device as claimed in claim 38, further comprising:

an input part inputting the projection image externally;

a recording part recording at least one of the projection image, user-drawn image and combined image; and

an output part outputting the user-drawn image externally.

Claim 46 (Previously Presented): The projection-type display device as claimed in claim 38, wherein;

said shifting part shifts the photography area by a distance corresponding to one pixel each time;

said shifting part comprises a piezoelectric device; and

the vibration distance of said piezoelectric device corresponds to one pixel.

Claim 47 (Previously Presented): The projection-type display device as claimed in claim 38, wherein:

said writing surface is divided into a plurality of areas;

said photography part takes a plurality of photographs of respective ones of the plurality of areas; and

a combining part is provided, and, thereby, a thus-obtained plurality of photographed images are combined.

Claim 48 (Previously Presented): The projection-type display device as claimed in claim 38, wherein:

a moving part moving a photography area of said photography part on said writing surface is provided;

said photography part takes a photograph several times in a manner such that the photography area thereof each time corresponds to a different division of said writing surface; and

a combining part is provided, and, thereby, photographed images obtained through the several times of photography are combined.

Claim 49 (Previously Presented): The projection-type display device as claimed in claim 48, further comprising a part displaying the photography area onto said projection surface.

Claim 50 (Previously Presented): The projection-type display device as claimed in claim 47, further comprising an input part through which instructions of at least one of whether or not a dividing photography is performed in which a part or all of said writing surface is divided and each division is photographed, and the number of divisions in the dividing photography, are input.

Claim 51 (Previously Presented): The projection-type display device as claimed in claim 48, further comprising an input part through which instructions of at least one of whether or not a dividing photography is performed in which a part or all of said writing surface is divided and each division is photographed, and the number of divisions in the dividing photography, are input.

Claim 52 (Previously Presented): The projection-type display device as claimed in claim 38, further comprising a lighting part illuminating said writing surface from a side opposite to a side on which said photography part is provided.

Claim 53 (Previously Presented): The projection-type display device as claimed in claim 38, further comprising at least one lighting part illuminating said writing surface from a side on which said photography part is provided.

Claim 54 (Previously Presented): The projection-type display device as claimed in claim 52, wherein said lighting part comprises a plurality of light sources located symmetrically with respect to a central axis of said writing part or an axis corresponding to an optical axis of a part projecting the projecting image onto said projection surface.

Claim 55 (Previously Presented): The projection-type display device as claimed in claim 53, wherein said lighting part comprises a plurality of light sources located symmetrically with respect to a central axis of said writing part or an axis corresponding to an optical axis of a part projecting the projecting image onto said projection surface.

Claim 56 (Previously Presented): The projection-type display device as claimed in claim 38, further comprising a dispersion surface removably provided on a surface of said writing surface opposite to a user who draws an image on said writing surface.

Claim 57 (Previously Presented): The projection-type display device as claimed in claim 38, further comprising:

a dispersion sheet comprising a dispersion area which covers all or a part of said writing part and a transparent area which transmits, to said writing surface, at least a part of a light beam emitted by a part which projects the projection image onto said projection surface;
and

a moving part moving said dispersion sheet.